

WHAT IS CLAIMED IS:

1. A flicker detecting method comprising the steps of:  
calculating a lightness value for each of at least two  
5 lines in a frame or a field of a video; and  
comparing the lightness value of at least two of said at  
least two lines.

2. The flicker detecting method according to claim 1,  
10 wherein at the calculating step, each of the lightness values  
of said at least two lines is calculated based on the pixel level  
of the entire line.

3. The flicker detecting method according to claim 1,  
15 wherein at the calculating step, the lightness value for all  
lines in the frame or the field is calculated.

4. The flicker detecting method according to claim 1,  
wherein at the comparing step, the lightness values between two  
20 adjacent lines of said at least two lines are compared.

5. The flicker detecting method according to claim 1,  
wherein at the comparing step, the lightness values between all  
adjacent lines in the frame or the field are compared.

25 6. The flicker detecting method according to claim 1,  
further comprising the step of:  
extracting a fluctuation cycle from a result of the  
comparing step.

30 7. The flicker detecting method according to claim 6,  
wherein at the extracting step, the fluctuation cycle in a  
vertical scanning direction of the frame or the field is  
extracted.

35 8. The flicker detecting method according to claim 6,

wherein at the extracting step, the fluctuation cycle is extracted from differences of the lightness values at the comparing step.

5           9.     The flicker detecting method according to claim 6, wherein the extracting step includes:

          taking differences from the result of the comparing step, and

          counting a number of continuations of an identical code  
10   from the differences.

          10.    The flicker detecting method according to claim 6, further comprising the step of:

          deciding that a flicker is present from a result of the  
15   extracting step.

          11.    The flicker detecting method according to claim 10, wherein at the deciding step, deciding that the flicker is present when the fluctuation cycle is within a predetermined  
20   frequency range.

          12.    The flicker detecting method according to claim 1, wherein the frame or the field is divided into a plurality of blocks and,

25           wherein at the comparing step, the lightness value of at least two of said at least two lines are compared in each of the plurality of blocks.

          13.    The flicker detecting method according to claim 12,  
30   further comprising the step of:

          extracting a fluctuation cycle in each of the plurality of blocks from a result of the comparing step.

          14.    The flicker detecting method according to claim 13,  
35   further comprising the step of:

          deciding that a flicker is present when a number of blocks

in which the fluctuation cycle is within a predetermined frequency range is within a predetermined value.

15. A flicker detecting apparatus comprising:  
5 calculating means for calculating a lightness value for each of at least two lines in a frame or a field of a video; and  
comparing means for comparing the lightness value of at least two of said at least two lines.

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16. The flicker detecting apparatus according to claim 15, wherein the calculating means calculates each of the lightness values of said at least two lines based on the pixel level of the entire line.

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17. The flicker detecting apparatus according to claim 15, wherein the calculating means calculates the lightness value for all lines in the frame or the field.

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18. The flicker detecting apparatus according to claim 15, wherein the comparing means compares the lightness values between two adjacent lines of said at least two lines.

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19. The flicker detecting apparatus according to claim 15, wherein the comparing means compares the lightness values between all adjacent lines in the frame or the field.

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20. The flicker detecting apparatus according to claim 15, further comprising:  
extracting means for extracting a fluctuation cycle from a result of the comparing means.

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21. The flicker detecting apparatus according to claim 20, wherein the extracting means extracts the fluctuation cycle in a vertical scanning direction of the frame or the field.

22. The flicker detecting apparatus according to claim 20, wherein the extracting means extracts the fluctuation cycle from differences of the lightness values.

5 23. The flicker detecting apparatus according to claim 20, wherein the extracting means includes:

taking difference means for taking differences from the result of the comparing means, and

10 counting means for counting a number of continuations of an identical code from the differences.

24. The flicker detecting apparatus according to claim 20, further comprising:

15 deciding means for deciding that a flicker is present from a result of the extracting means.

25. The flicker detecting apparatus according to claim 24, wherein the deciding means decides that the flicker is present when the fluctuation cycle is within a predetermined frequency range.

26. The flicker detecting apparatus according to claim 15, wherein the frame or the field is divided into a plurality of blocks and,

25 wherein the comparing means compares the lightness value of at least two of said at least two lines in each of the plurality of blocks.

30 27. The flicker detecting apparatus according to claim 26, further comprising:

extracting means for extracting a fluctuation cycle in each of the plurality of blocks from a result of the comparing means.

35 28. The flicker detecting apparatus according to claim 27, further comprising:

deciding means for deciding that a flicker is present when a number of blocks in which the fluctuation cycle is within a predetermined frequency range is within a predetermined value.

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